

WHAT IS CLAIMED IS:

1. A recording apparatus comprising:
 - a discoid record medium;
 - 5 a head for writing or reading data to/from the discoid record medium;
 - a rotation shaft for rotating the discoid record medium; and
 - a control unit for controlling a position of the head;
 - 10 the discoid record medium having thereon radially recorded in advance servo information defining the position of the head on the discoid record medium,
 - the control unit controlling the head based on position conversion information for allowing the position of the
 - 15 head located by the servo information to correspond to a position on concentric orbits which center is the rotation shaft, wherein
 - the control unit further stores the position conversion information in a predetermined area on
 - 20 concentric orbits defined by the servo information, determines whether or not the position conversion information is stored in the predetermined area on the concentric orbits defined by the servo information at a start-up of the recording apparatus and, when the position
 - 25 conversion information is stored in the predetermined area on the concentric orbits defined by the servo information, reads out the position conversion information and controls

the head based on the read out position conversion information.

2. The recording apparatus according to claim 1, wherein

5 the recording apparatus further comprises a memory unit in which the position conversion information is stored, and wherein

the control unit determines whether or not a first position conversion information stored in the memory unit
10 can be read out at the start-up and, when the first position conversion information can be read out, controls the head based on the read out first position conversion information and, when the first position conversion information can not be read out, first, reads out a second position
15 conversion information stored in the predetermined area on the concentric orbits defined by the servo information by controlling the head along the concentric orbits defined by the servo information, then, selects a control such that the head is controlled based on the read out second
20 position conversion information.

3. The recording apparatus according to claim 2, wherein

the predetermined area on the concentric orbits defined by the servo information, in which the second
25 position conversion information is stored, is an area on the concentric orbits which center is the rotation shaft, from which data can be read out even when data have been

written along the concentric orbits which center is the rotation shaft.

4. The recording apparatus according to claim 3, wherein
5 the concentric orbits defined by the servo information are further circumferentially divided into a plurality of sectors, and wherein the predetermined area of the orbits, in which the second position conversion information is stored, is a part of the plurality of sectors.

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5. The recording apparatus according to claim 1, wherein
the recording apparatus further has a memory unit in which the position conversion information is stored, wherein

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the control unit stores the position conversion information in a predetermined area on the concentric orbits which center is the rotation shaft, and wherein

the control unit determines whether or not a first position conversion information stored in the memory unit
20 can be read out at the start-up and, when the first position conversion information can be read out, reads out a second position conversion information stored in the

predetermined area on the concentric orbits which center is the rotation shaft by controlling the head based on

the read out first position conversion information,
25 compares the first position conversion information and the second position conversion information with each other,

and when they do not coincide with each other as a result of the comparison, first, switches a control such that the head is controlled along the concentric orbits defined by the servo information and reads out a third position
5 conversion information stored in the predetermined area on the concentric orbits defined by the servo information and, then, switches again the control such that the head is controlled based on the read out third position conversion information.

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6. The recording apparatus according to claim 5, wherein the predetermined area on the concentric orbits defined by the servo information in which the third position conversion information is stored is an area on the
15 concentric orbits determined by the servo information, from which data can be read out even when data have been written along the concentric orbits which center is the rotation shaft.

20 7. The recording apparatus according to claim 6, wherein the concentric orbits defined by the servo information are further circumferentially divided into a plurality of sectors, and wherein

the predetermined area of the concentric orbits
25 defined by the servo information, in which the third position conversion information is stored, is a part of the plurality of sectors.

8. A method of starting up a recording apparatus having a discoid record medium on which is recorded servo information locating a position of a head, wherein
5 position conversion information for allowing the position located by the servo information to correspond to a position on concentric orbits which center is a rotation shaft for causing the discoid record medium to rotate, is stored in advance in a predetermined area on concentric
10 orbits defined by the servo information, wherein
whether or not the position conversion information is stored in the predetermined area on the concentric orbits defined by the servo information is determined at a start-up of the recording apparatus, wherein
15 when the position conversion information is stored in the predetermined area on the concentric orbits defined by the servo information, the position conversion information is read out, and wherein
the head is controlled based on the read out position
20 conversion information.

9. The method of starting up a recording apparatus according to claim 8, wherein
the recording apparatus further has a memory unit in
25 which the position conversion information is stored, wherein
whether or not a first position conversion information

stored in the memory unit can be read out is determined,
wherein

when the first position conversion information can
be read out, the head is controlled based on the read out
5 first position conversion information, and wherein

when the first position conversion information can
not be read out, first, a second position conversion
information stored in the predetermined area on the
concentric orbits defined by the servo information is read
10 out by controlling the head along the concentric orbits
defined by the servo information, then, a control is
switched such that the head is controlled based on the
read out second position conversion information.

15 10. The method of starting up a recording apparatus
according to claim 8, wherein

the recording apparatus further has a memory unit in
which the position conversion information is stored,
wherein

20 the position conversion information is further stored
in advance in a predetermined area on the concentric orbits
which center is the rotation shaft, wherein

whether or not a first position conversion information
stored in the memory unit can be read out is determined
25 at the start-up of the recording apparatus, wherein

when the first position conversion information can
be read out, the head is controlled based on the read out

first position conversion information, wherein

a second position conversion information stored in the predetermined area on the concentric orbits which center is the rotation shaft is read out, wherein

5 the first position conversion information and the second position conversion information is compared with each other, wherein

when they do not coincide with each other as a result of the comparison, first, a third position conversion
10 information stored in the predetermined area on the concentric orbits defined by the servo information is read out by switching a control such that the head is controlled along the concentric orbits defined by the servo information, and wherein

15 the control is switched again such that the head is controlled based on the read out third position conversion information.